CLAIMS

1. A (meth)acrylic resin emulsion comprising, as a dispersant, a vinyl alcohol polymer having a degree of saponification of from 80 to 95 mol% and a degree of polymerization of from 400 to 2000 and, as a dispersoid, a polymer comprising at least one type of monomer units selected from acrylate monomer units and methacrylate monomer units, which has a "factor a" of at least 0.3 that indicates the particle size distribution width of the emulsion and of which the film formed at 20°C and 65 % RH to have a thickness of 500 μm has a tensile strength of at least 100 kg/cm^2.

2. The (meth)acrylic resin emulsion as claimed in claim 1, wherein the dissolution of the film formed from the emulsion at 20°C and 65 % RH to have a thickness of 500 μm is at most 10 %, when dipped in an aqueous 1 N sodium hydroxide solution at 20°C for 24 hours.

3. The (meth)acrylic resin emulsion as claimed in claim 1, wherein the vinyl alcohol polymer contains from 1 to 20 mol% of α-olefin units having at most 4 carbon atoms in the molecule.

4. The (meth)acrylic resin emulsion as claimed in claim 1, wherein the vinyl alcohol polymer contains at least 1.9 mol% of 1,2-glycol bond.

5. The (meth)acrylic resin emulsion as claimed in claim 1, wherein the vinyl alcohol polymer contains from 1 to 20 mol% of α-olefin units having at most 4 carbon atoms in the molecule,

and contains from (1.7 - X/40) to 4 mol% of 1,2-glycol bond where the content of the α-olefin units is represented by X mol%.

6. A method for producing a (meth)acrylic resin emulsion which has a "factor a" of at least 0.3 that indicates the particle size distribution width of the emulsion and of which the film formed at 20°C and 65 % RH to have a thickness of 500 μm has a tensile strength of at least 100 kg/cm^2; the method comprising emulsion (co)polymerization of at least one monomer selected from acrylate monomers and methacrylate monomers, using, as a dispersant, a vinyl alcohol polymer having a degree of saponification of from 80 to 95 mol% and a degree of polymerization of from 400 to 2000 and using a redox-type polymerization initiator that comprises a peroxide and a reducing agent, wherein the emulsion (co)polymerization is effected in such a controlled manner that (1) an iron compound, (2) the monomer and (3) the vinyl alcohol polymer are fed into the reactor in the initial stage of the reaction and the peroxide is continuously or intermittently added to the polymerization system.

7. The method for producing a (meth)acrylic resin emulsion as claimed in claim 6, wherein the reducing agent is fed into the system in the initial stage of polymerization.

8. The method for producing a (meth)acrylic resin emulsion as claimed in claim 6, wherein the amount of the

peroxide is from 0.01 to 1 part by weight in terms of the pure content thereof, relative to 100 parts by weight of the monomer.

9. The method for producing a (meth)acrylic resin emulsion as claimed in claim 6, wherein the reducing agent is L(+)-tartaric acid and/or sodium L(+)-tartrate.

10. The method for producing a (meth)acrylic resin emulsion as claimed in claim 6, wherein the amount of the iron compound is from 1 to 50 ppm relative to all the monomer.

11. The method for producing a (meth)acrylic resin emulsion as claimed in claim 6, wherein a chain transfer agent is not substantially used.

12. The method for producing a (meth)acrylic resin emulsion as claimed in claim 6, wherein a surfactant is not substantially used.

13. A synthetic resin powder obtained by drying the (meth)acrylic resin emulsion of claim 1.